

		WIRE SPACING TABLE	.ABLE			
COMBINATION	COMBINATION WOVEN WIRE & BARBED) WIRE FENCE		BARBED W	WIRE FENCE	
1200 FEN	FENCE HEIGHT	1280 FENCE HEIGHT		1.2 m FEN	FENCE HEIGHT	
813 WW-2 BW *	813 WW-3 BW *	990 WW-2 BW *	3 BW	4 BW	5 BW	6 BW
TYPE F2-813WW	TYPE F3-813WW	TYPE F2-990WW	TYPE F3	TYPE F4	TYPE F5	TYPE F6
225 125 150 140 125 119 09 08 05 0	150 1100 1100 1100 1100 1100 1100 1100	00 00 00 150140125119,090850	400	300	300 300 250 2000	300 200 200 200 9
APPROXIMATE WEIGHT OF 813 PER 100 m ROD ROLL IS 68	F 813 mm WOVEN WIRE FABRIC (832-6-12.5) S 68 kg ±5 kg (NOTE: 12.5 GAGE)	2-6-(2.5) GE)	APPROXIMATE WEIGHT OF 990 WOVEN WIRE FABRIC (939-6-12.5) PER 100 m ROLL IS 77 kg ±5 kg. (NOTE: 12.5 GAGE)	IT OF 990 WOVEN S 77 kg ±5 kg.	WIRE FABRIC (939- (NOTE: 12.5 GAGE	6-12.5)

중

BETWEEN STAYS 3 %

THAN EXTEND LONGER S 50 WIRE STAYS FOR BARBED WIRE FENCING BETWEEN THE TOP AND BOTTOM WIRES. 4.

. 독표. FOR WOVEN WIRE FENCING WITH BARBED MINIMUM BELOW THE TOP OF THE WOVEN WHEN WOOD STAYS ARE SPECIFIED, U
50 mm × 50 mm, OR A 37.5 mm ×
STAY MUST BE OF SUFFICIENT LENGT
TOP OF THE STAY EXTENDING 50 mm
TO THE WOOD STAYS USING 44 mm ×
NEED TO BE TREATED.

DENOTES DENOTES SE ¥≤

DIMENSIONS ARE MILLIMETERS UNLESS OTHERWISE NOTED.

S. PANEL DETAIL: DOUBLE FENCING 607-05 FOR SINGLE AND 607-10 FOR ADDITIONAL 98 DWG. 01L.

BRACE WIRES - ONE CONTINUOUS 9 OR 12.5 GAGE SMOOTH WIRE DOUBLED TO FORM A FOUR WIRE BRACE. THE TWO ENDS NEAR THE TOP OF THE PANEL POSTS. LEVERS - $37.5 \times 50 \times 300$ MINIMUM SIZE. 2500 BRACE RAIL SEE DETAIL "A" LOO ROUND OR 100 SO. SAWN DO NOT INTER-WEAVE WIRE AT POINT OF CROSSING

WHEN SQUARE POSTS ARE DETAIL "A" USED, NOTCHING IS NOT NECESSARY. 5000 2500 2500 - 150 100 1350 1350 800 WOVEN LEVERS LEVERS (LEAVE IN PLACE L 50 AFTER TWISTING) POSTS: 750 2400 x 125 ROUND OR 125 SQ, SAWN 1050 1050

NOTCH 25

TYPICAL

9 GAGE STAPLE

SINGLE PANEL FOR PULLING, STRETCHING, CHANGES IN VERTICAL ALIGNMENT OR PANELS ON A

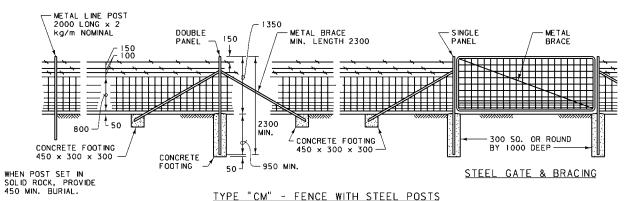
LINE POST 2100 x 100 MIN. ROUND OR 100 x 100 SO. SAWN

DOUBLE PANEL FOR CORNERS, PULLING OR STRETCHING, AND CHANGES IN HORIZONTAL ALIGNMENT.

-NAIL TO POST WITH 4 ~ 20d

GALV. NAILS

TYPE "CW" - "STRAIGHT RUN" FENCE WITH WOOD POSTS



POSTS-

OR 125 SQ. SAWN

SEE THE STANDARD SPECIFICATIONS FOR POST AND GATE REQUIREMENTS.

PLACE ALL FENCE WIRE ON PASTURE SIDE OF POST, EXCEPT ON CURVES. THEN, PLACE THE WIRE ON THE OUTSIDE OF THE CURVE.

IN AREAS SUBJECT TO HIGH VELOCITY WINDS AND MOVING DEBRIS, WIRES MAY BE PLACED ON WINDWARD SIDE OF POSTS, EXCEPT ON

ALL CONCRETE IS CLASS "F" OR BETTER.

POST SPACING IS GENERALLY MEASURED PARALLEL TO GROUND.

LINE POST SPACING IS 5000 mm CENTER TO CENTER. LINE POST SPACING FROM BRACE OR PANEL POST IS 5000 mm CENTER TO CENTER.

PLACE 600 mm WIRE STAY HALFWAY BETWEEN POSTS. DO NOT PLACE STAYS ON PANELS FOR "CM" AND "CW" FENCE.

TYPE "CW" FENCE HAS ONE METAL POST IN PLACE OF A WOODEN LINE POST IN EACH 150 m RUN FOR LIGHTNING PROTECTION.

USE TYPE "CW" (WOOD) PANELS ON ALL TYPE "CM" (METAL) FENCES INSTEAD OF STEEL PANELS UNLESS OTHERWISE SPECIFIED.

SET STEEL CORNER, END, GATE AND PULL POSTS, AND EACH BRACE IN CONCRETE AS SHOWN.

SEE DTL. DWG. NO. 607-10 FOR ADDITIONAL FENCING DETAILS.

A DEADMAN MAY BE A PRECAST CONCRETE BLOCK, A CAST IN PLACE CONCRETE BLOCK, A ROCK OR OTHER APPROVED OBJECT WEIGHING AT LEAST 70 kg. BURY THE DEADMAN IN THE GROUND WITH AT LEAST 600 mm OF COVER. ATTACH THE DEADMAN TO THE FENCE WITH 3 STRANDS OF 9 GAGE WIRE OR 6 STRANDS OF 12.5 GAGE WIRE. SEE DETAILED DRAWING NO. 607-10 FOR ALTERNATE DEADMAN.

STAPLE THE BOTTOM, TOP, CENTER AND ALTERNATE WIRES OF WOVEN WIRE TO WOOD LINE POSTS.

TIE THE BOTTOM, TOP, CENTER AND ALTERNATE WIRES OF WOVEN WIRE TO STEEL LINE POSTS.

STAPLE ALL WIRES OF WOVEN WIRE TO WOOD CORNER POSTS OR POST USED TO TIE-OFF WIRE.

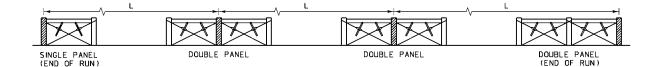
DETAILED DRAWING REFERENCE DWG. NO. 607-05 SECTION 607

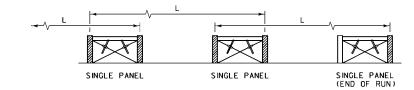
INTERSTATE FENCE

EFFECTIVE: JANUARY 2004

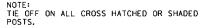


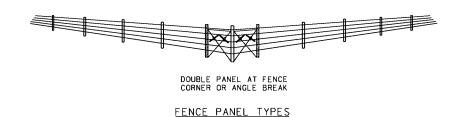
ALL DIMENSIONS ARE MILLIMETERS (mm) UNLESS OTHERWISE NOTED.

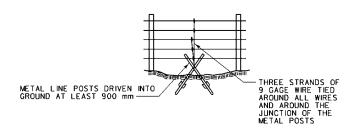




FENCE TYPE	RUN = L (m)	PANELS REQUIRED
COMBINATION	LESS THAN 10	NONE
	10 - 100	SINGLE
BARBED	OVER 100 TO 200 MAX.	DOUBLE
	LESS THAN 20	NONE
BARBED	20 - 200	SINGLE
DARBED	OVER 200 TO 300 MAX.	DOUBLE







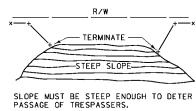
ALTERNATE DEADMAN

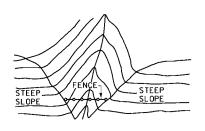
WHEN APPROVED BY THE ENGINEER THE ABOVE DEADMAN MAY BE USED IN LIEU OF A ROCK OR PRECAST CONCRETE BLOCK AS SPECIFIED ON DTL. DWG. NO. 607-05.

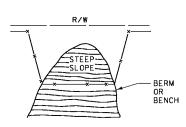
ATTACH BARBED WIRES TO POSTS BY WRAPPING AROUND THE POST AT LEAST TWO TIMES, THEN WRAPPING AROUND ITSELF FIVE TIMES.

TO ATTACH WOVEN WIRE TO AN END POST, REMOVE TWO OR THREE VERTICAL STAY WIRES FROM THE END OF THE FENCE. PLACE THE FIRST COMPLETE VERTICAL STAY WIRE AGAINST THE POST. START AT THE MIDDLE OF THE HORIZONTAL LINE WIRES, WRAPPING AROUND THE END POST AT LEAST TWO TIMES AND THEN WRAPPING AROUND ITSELF FIVE TIMES.

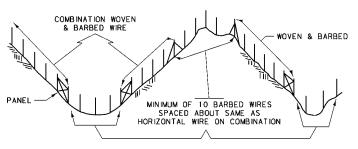
DETAILED	DRAWING
REFERENCE	DWG. NO
STANDARD SPEC. SECTION 607	607-10
FENCING	DETAILS
EFFECTIVE: JANUARY	2004
MONTANA	DEPARTMENT (MONTAN



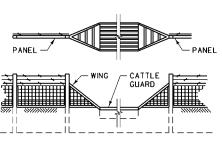




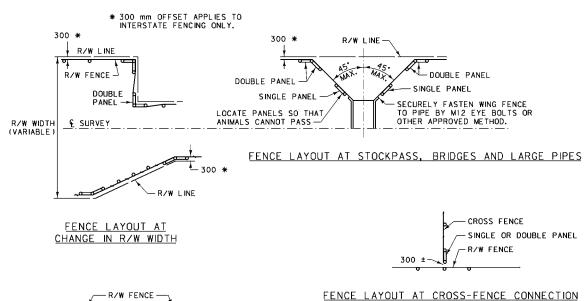
FENCE LAYOUT ON STEEP SLOPES

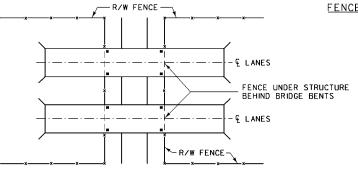


FENCE LAYOUT ON SHARP VERTICAL CURVES TO AVOID TRYING TO CONFORM WOVEN WIRE TO UNEVEN TERRAIN



FENCE CONNECTION TO CATTLE GUARD SECURELY FASTEN FENCE WIRE TO THE WINGS AND ARRANGE SO THAT ANIMALS CANNOT PASS.





FENCE LAYOUT AT LOCAL ROAD UNDER INTERSTATE

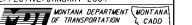
ALL DIMENSIONS ARE MILLIMETERS (mm) UNLESS OTHERWISE NOTED.

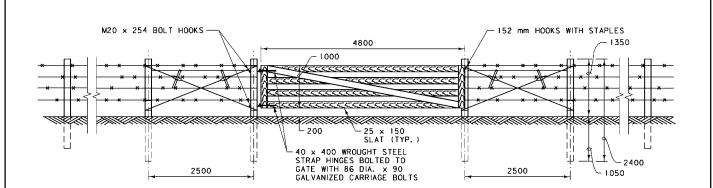
DETAILED DRAWING REFERENCE STANDARD SPEC. SECTION 607 DWG. NO. 607-15

EFFECTIVE: AUGUST 1999

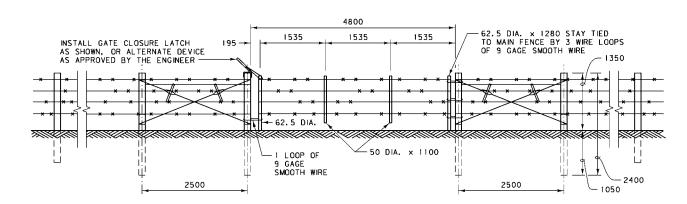
MONTANA DEPARTMENT MONTANA
OF TRANSPORTATION CADD

FENCING DETAILS



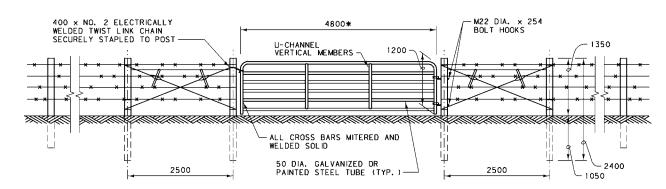


WOOD FARM ENTRANCE GATE (TYPE G-1) NOTE: USE 10d NAILS AND CLINCH FOR GATE CONSTRUCTION.



WIRE FARM ENTRANCE GATE (TYPE G-2)

NOTE: USE SAME WIRE SCHEME ON GATE AS THAT USED ON FENCE, UNLESS STATED OTHERWISE IN R/W AGREEMENT.



METAL FARM ENTRANCE GATE (TYPE G-3)

ALL DIMENSIONS ARE MILLIMETERS

(mm) UNLESS OTHERWISE NOTED.

ALL GATES ARE 4800 mm WIDE UNLESS R/W AGREEMENT STATES OTHERWISE.

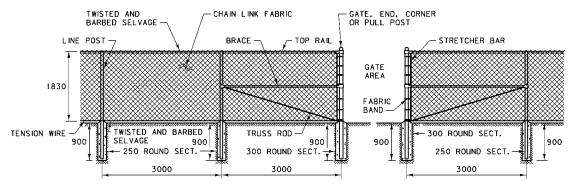
ALL GATES WILL HAVE A SINGLE OR DOUBLE PANEL AT EACH END.

* TYPE G-3 GATES ARE AVAILABLE IN WIDTHS FROM 1.2 m TO 6.0 m IN 0.6 m INCREMENTS.

ETAILED DRAWING REFERENCE STANDARD SPEC.

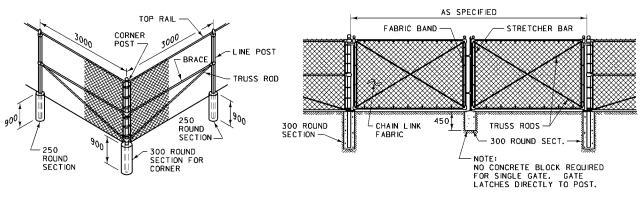
EFFECTIVE: JANUARY 2004 MONTANA DEPARTMENT MONTANA
OF TRANSPORTATION & CADD

DWG. NO. 607-20 SECTION 607 FARM ENTRANCE GATES



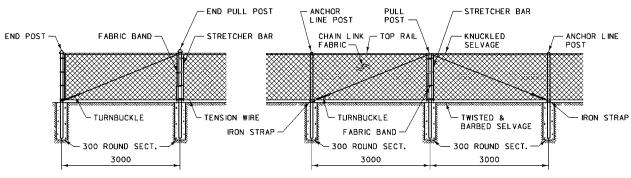
1.8 m CHAIN LINK FENCE

SINGLE PANEL



DOUBLE PANEL PULL POST AND CORNER POST BRACING

<u>GATES</u>



CHAIN LINK FENCE - 0.9 m, 1.2 m AND 1.5 m

NOTES:

SEE THE STANDARD SPECIFICATIONS FOR FURTHER REQUIREMENTS.

DO NOT INSTALL DOUBLE PANELS MORE THAN 90 m APART ON TANGENTS OR MORE THAN 75 m APART ON ANY CURVE. FOR CURVES WITH A RADIUS SHARPER THAN 350 m, INSTALL A DOUBLE PANEL ON EACH CURVE END, PLUS ONE ADDITIONAL PANEL FOR EACH 10° OF DEFLECTION, EVENLY SPACED, BETWEEN THE CURVE ENDS.

PULL POST BRACING ON 1.8 m FENCE IS THE SAME AS CORNER

A DROP BAR LOCKING DEVICE IS REQUIRED FOR ALL DOUBLE GATE INSTALLATIONS. THE DROP BAR MUST BE ABLE TO BE INSERTED INTO THE CONCRETE BLOCK AT LEAST 150 mm.

HEIGHT OF FABRIC	WIRE FABRIC ABOVE GROUND	DEPTH OF CONCRETE	DEPTH OF POST IN CONC. (MIN.)
1830	25 TO 50	900	800
1525	25 TO 50	900	800
1220	25 TO 50	750	650
915	25 TO 50	750	650

ALL CONCRETE IS CLASS "F" OR BETTER.

WHEN FENCE IS LESS THAN 15 m FROM THE EDGE OF A DRIVING LANE, USE A 9.5 mm DIA. GALVANIZED STEEL CABLE IN PLACE OF THE TOP METAL BRACE RAIL.

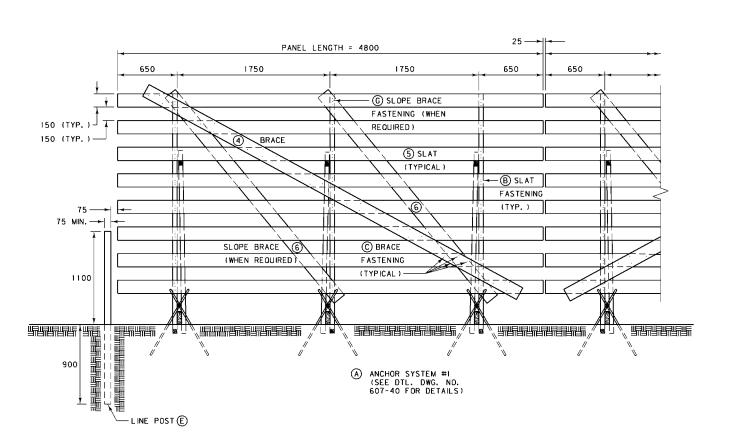
ALL DIMENSIONS ARE MILLIMETERS (mm) UNLESS OTHERWISE NOTED.

DETAILED DRAWING REFERENCE DWG. NO. 607-25 SECTION 607

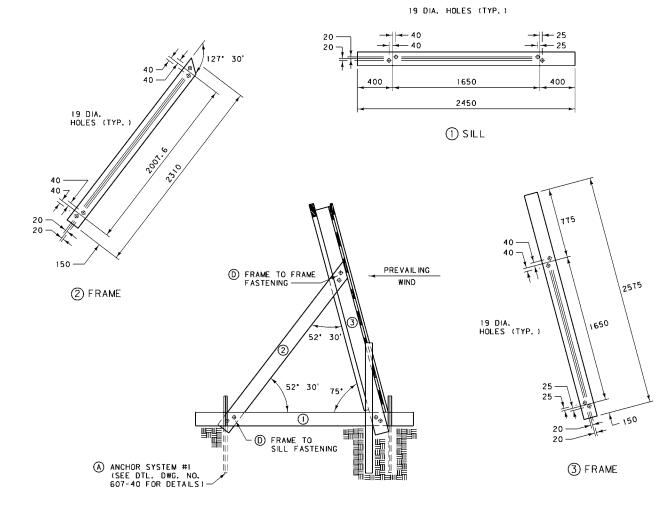
CHAIN LINK FENCE

EFFECTIVE: AUGUST 1999





FRONT VIEW



END VIEW

GENERAL NOTES

- (A) ANCHOR SYSTEM DETAIL
 USE ANCHOR SYSTEM #1 UNLESS SOIL AND MOISTURE CONDITIONS NECESSITATE THE USE
 OF AN ALTERNATE SYSTEM, OR AS DIRECTED BY THE ENGINEER. CONSULT DETAILED
 DRAWING NUMBERS 607-40 AND 607-45 FOR ANCHOR SYSTEMS #3 (ROCKY CONDITIONS)
 AND #2 (SWAMPY CONDITIONS).
- (B) SLAT FASTENING FASTEN SLATS TO THE FRAME WITH 3 ~ 12d COMMON BARBED SHANK NAILS AT EACH LOCATION.
- © BRACE FASTENING
 FASTEN BRACES TO THE FRAME WITH 4 ~ 8d COMMON NAILS AT EACH LOCATION AND
- (D) FRAME TO SILL AND FRAME TO FRAME FASTENING
 FASTEN THE SILL AND FRAME MEMBERS TO THE FRAME AT EACH LOCATION WITH 2 ~
 M16 x 127 mm STANDARD MACHINE BOLTS, EACH WITH HEX NUT AND TWO FLAT
 WASHERS. SEE NOTE (X) AT RIGHT.
- E LINE POSTS PLACE LINE POSTS AT EACH END OF EACH LINE OF SNOW FENCE AS SHOWN. POSTS ARE 2000 mm LONG WITH A MINIMUM DIAMETER OF 75 mm AND A MAXIMUM DIAMETER OF 150 mm. BUTT TREAT 900 mm MINIMUM.
- (F) WIRE TIE USE 12 GAGE OR HEAVIER GALVANIZED WIRE TO FORM THE WIRE TIES.
- (6) SLOPE BRACE FASTENING FASTEN SLOPE BRACES WITH 3 ~ 16d COMMON BARBED SHANK NAILS AT EACH LOCATION.

BILL OF MATERIALS FOR ONE PANEL						
ITEM NO.	NO. OF PIECES	LUMBER SIZE	DESCRIPTION			
①*	3	50 x 150 x 2450	FRAME (SILL)			
2*	3	50 x 150 x 2310	FRAME			
3*	3	50 x 150 x 2575	FRAME			
* NOTE: PRESSURE TREAT ALL 50 x 150 MEMBERS (ENTIRE FRAME)						
4	1	25 × 150 × 4800	BRACE			
(5)	8	25 × 150 × 4800	SLAT			
(6)**	2	50 × 150 × 3000	SLOPE BRACE			

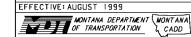
			1
	HARDWAF	RE - 2.4 m SNOW FENCE W/ ANCHOR SYSTEM #1	
		BILL OF MATERIALS FOR ONE PANEL	
	QUANTITY	DESCRIPTION	
(18	M16 x 127 HEX BOLT (THREADED FULL LENGTH) AND NUT	→ ⊗ NOTE:
(18 MI6 x 127 HEX BOLT (THREADED FULL LENGTH) AND NUT 36 FLAT WASHER FOR MI6 BOLT 0.50 kg 12d COMMON BARBED SHANK NAIL 12 #19 REBAR x 1500 6 PIECES 12 GAGE TIE WIRE x 1500 ±	FLAT WASHER FOR MI6 BOLT	AFTER MI6 BOLTS HAVE BEEN TIGHTENED, BURR THE THREAD DIRECTLY BEHIND THE
$^{f B}$	0.50 kg 12d COMMON BARBED SHANK NAIL		NUT TO PREVENT EVENTUAL LOOSENING OF THE NUTS.
lack	12	#19 REBAR x 1500	LOUSENING OF THE NUTS.
(F)	6 PIECES	12 GAGE TIE WIRE x 1500 ±	
OUANTITY DESCRIPTION DESCRIPTION DESCRIPTION NOTE AFTE BEEN THRE BEEN TH			
©	0.11 kg	16d COMMON BARBED SHANK NAILS	
	ALL MAILS MAY BE	CITUED HAND DRIVEN OR DRIVEN WITH A PMEHMATIC MAILER	

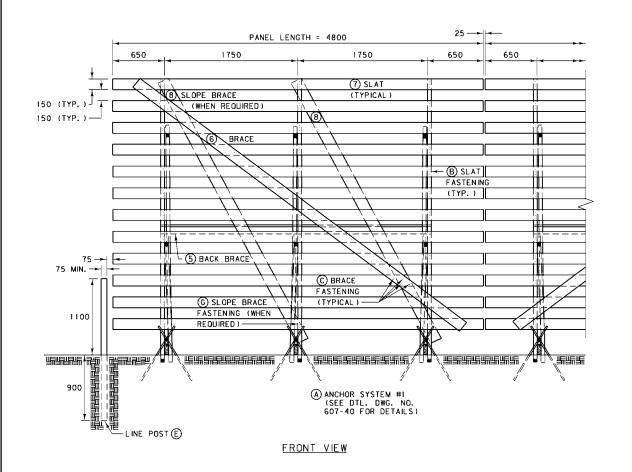
ALL NAILS MAY BE EITHER HAND DRIVEN OR DRIVEN WITH A PNEUMATIC NAILER.

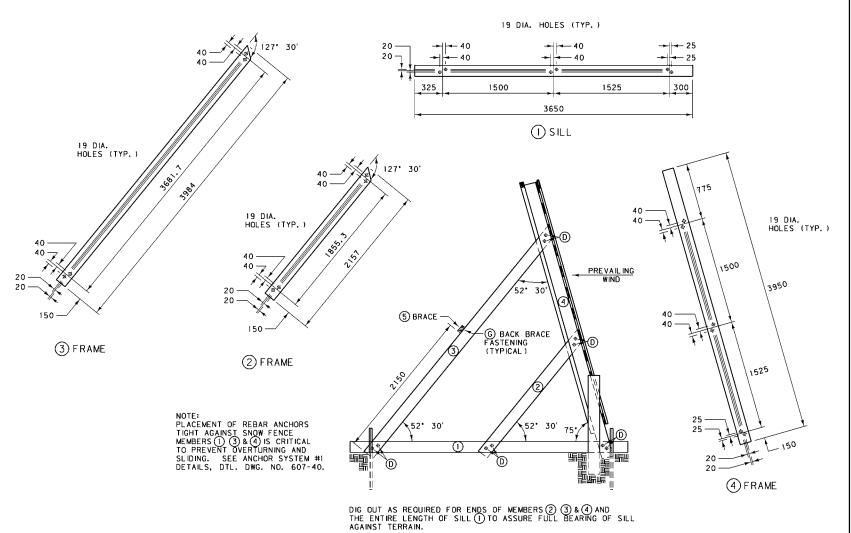
DETAILED DRAWING
REFERENCE DWG. NO.
STANDARD SPEC. 607-30
SECTION 607

2.4 m WOOD SNOW FENCE W/ ANCHOR SYSTEM #1

ALL DIMENSIONS ARE MILLIMETERS (mm) UNLESS OTHERWISE NOTED.







GENERAL NOTES

- ANCHOR SYSTEM DETAIL
 USE ANCHOR SYSTEM #1 UNLESS SOIL AND MOISTURE CONDITIONS NECESSITATE THE USE
 OF AN ALTERNATE SYSTEM, OR AS DIRECTED BY THE ENGINEER. CONSULT DETAILED
 DRAWING NUMBERS 607-40 AND 607-45 FOR ANCHOR SYSTEMS #3 (ROCKY CONDITIONS)
 AND #2 (SWAMPY CONDITIONS).
- (B) SLAT FASTENING FASTEN SLATS TO THE FRAME WITH 3 ~ 12d COMMON BARBED SHANK NAILS AT EACH LOCATION.
- © BRACE FASTENING FASTEN BRACES TO THE FRAME WITH 4 ~ 8d COMMON NAILS AT EACH LOCATION AND CLINCH.
- (D) FRAME TO SILL AND FRAME TO FRAME FASTENING
 FASTEN THE SILL AND FRAME MEMBERS TO THE FRAME AT EACH LOCATION WITH 2 ~
 M16 x 127 mm STANDARD MACHINE BOLTS, EACH WITH HEX NUT AND TWO FLAT
 WASHERS. SEE NOTE (X) AT RIGHT.
- E LINE POSTS PLACE LINE POSTS AT EACH END OF EACH LINE OF SNOW FENCE AS SHOWN. POSTS ARE 2000 mm LONG WITH A MINIMUM DIAMETER OF 75 mm AND A MAXIMUM DIAMETER OF 150 mm. BUTT TREAT 900 mm MINIMUM.
- $\stackrel{\textstyle \leftarrow}{\text{(F)}}$ wire tie use 12 gage or heavier galvanized wire to form the wire ties.
- (G) BACK & SLOPE BRACE FASTENING
 FASTEN BACK BRACES TO THE FRAME WITH 2 ~ 16d NAILS, AND FASTEN THE SLOPE
 BRACES WITH 3 ~ 16d BARBED SHANK NAILS AT EACH LOCATION.

BILL OF MATERIALS FOR ONE PANEL						
ITEM NO.	NO. OF PIECES	LUMBER SIZE	DESCRIPTION			
①*	3	50 × 150 × 3650	SILL			
2*	3	50 x 150 x 2157	FRAME			
3*	3	50 × 150 × 3984	FRAME			
4 *	3	50 × 150 × 3950	FRAME			
* NOTE: PRESSURE TREAT ALL 50 x 150 MEMBERS (ENTIRE FRAME)						
(5)	1	50 × 100 × 3650	BACK BRACE			
6	1	25 × 150 × 5400	BRACE			
(7)	12	25 × 150 × 4800	SLAT			
_	2	50 × 150 × 4000	SLOPE BRACE			

HARDWARE - 3.6 m SNOW FENCE W/ ANCHOR SYSTEM #1						
	BILL OF MATERIALS FOR ONE PANEL					
QUANTITY	DESCRIPTION					
30	M16 × 127 HEX BOLT (THREADED FULL LENGTH) AND NUT					
60	FLAT WASHER FOR MIG BOLT					
0.23 kg	8d COMMON NAILS					
0.76 kg	12d COMMON BARBED SHANK NAILS					
0.23 kg	16d COMMON BARBED SHANK NAILS					
12	#19 REBAR x 1500					
6 PIECES	12 GAGE TIE WIRE x 1500 ±					

END VIEW

ALL NAILS MAY BE EITHER HAND DRIVEN OR DRIVEN WITH A PNEUMATIC NAILER.

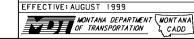
NOTE:

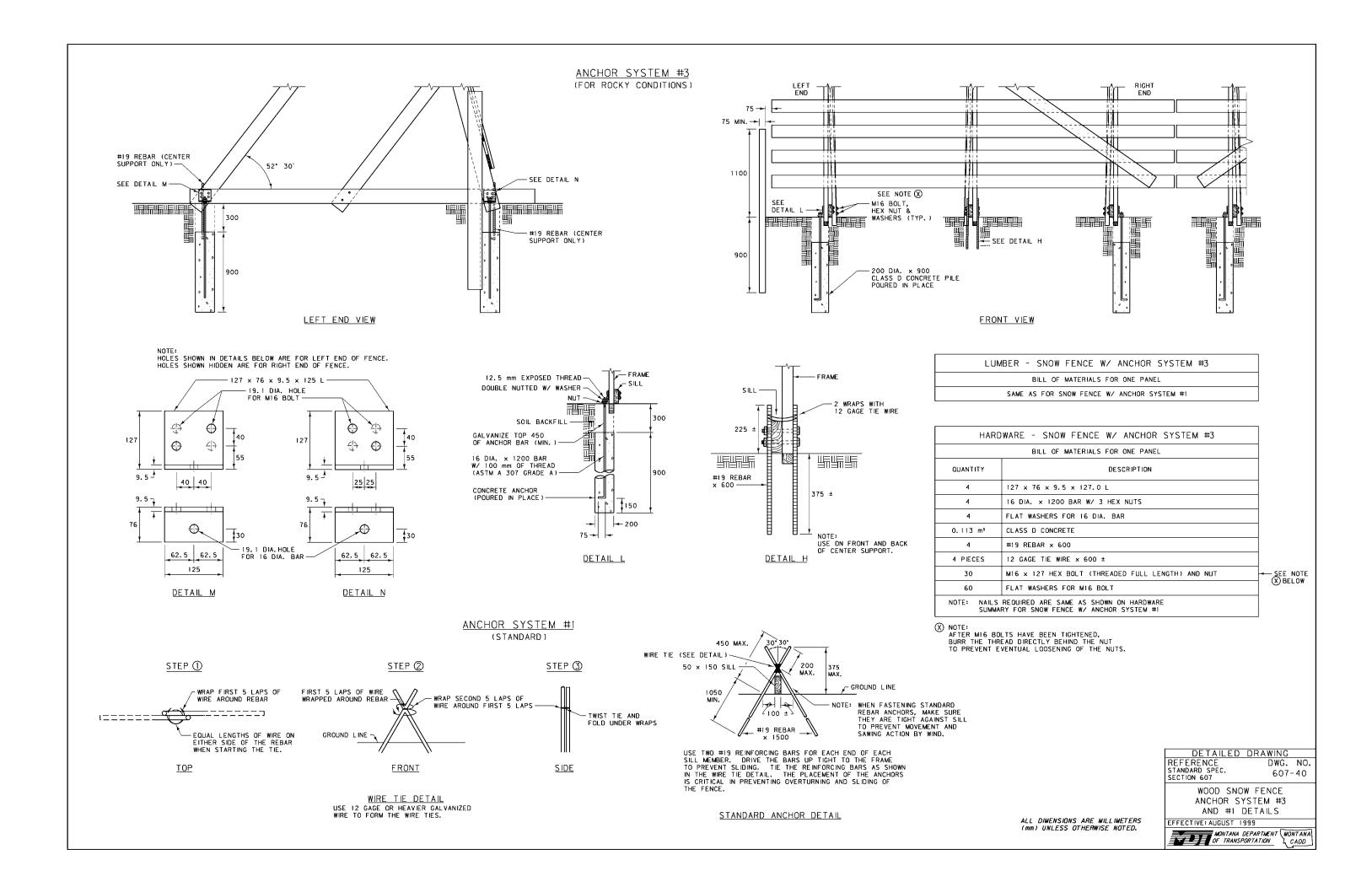
AFTER MI6 BOLTS HAVE BEEN TIGHTENED, BURR THE THREAD DIRECTLY BEHIND THE NUT TO PREVENT EVENTUAL LOOSENING OF THE NUTS.

DETAILED DRAWING
REFERENCE DWG. NO.
STANDARD SPEC. 607-35

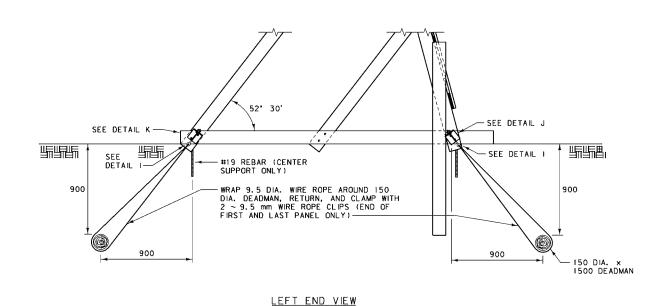
3.6 m WOOD SNOW FENCE W/ ANCHOR SYSTEM #1

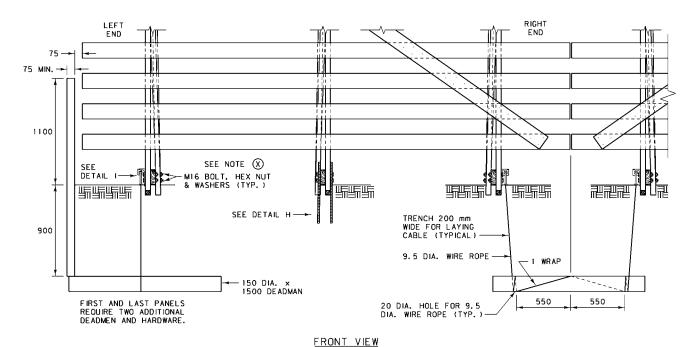
ALL DIMENSIONS ARE MILLIMETERS (mm) UNLESS OTHERWISE NOTED.





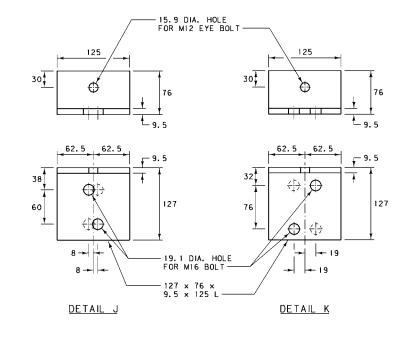
ANCHOR SYSTEM #2 (FOR SWAMPY CONDITIONS)





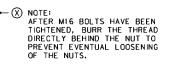
LUMBER	- SNOW	FENCE	W/	ANCHOR	SYSTEM	#2
	BILL OF	MATERIAL	s Fo	R ONE PAN	EL	
SAME	AS FOR S	NOW FENC	E W/	ANCHOR S	YSTEM #1	

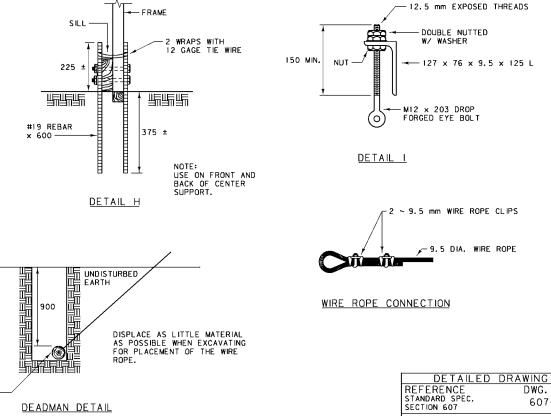
		_	
HARD	WARE - SNOW FENCE W/ ANCHOR SYSTEM #2		
	BILL OF MATERIALS FOR ONE PANEL		
QUANTITY	DESCRIPTION		
4	127 × 76 × 9.5 × 127.0 L		
8	9.5 mm WIRE CLAMPS		
4	MI2 DROP FORGED EYEBOLTS W/ 3 HEX NUTS		
4	FLAT WASHERS FOR M12 EYEBOLTS	1	
4	#19 REBAR x 600		
4 PIECES	12 GAGE TIE WIRE x 600 ±		
8500 mm	9.5 DIA. WIRE ROPE		
2	150 DIA. × 1500 POST DEADMEN		
30	M16 x 127 HEX BOLT (THREADED FULL LENGTH) AND NUT	-	
60	FLAT WASHERS FOR MIG BOLT		
	REOUIRED ARE SAME AS SHOWN ON HARDWARE RY FOR SNOW FENCE W/ ANCHOR SYSTEM #1		



150 DIA. × 1500 DEADMAN

HOLES SHOWN IN DETAILS BELOW ARE FOR LEFT END OF FENCE. HOLES SHOWN HIDDEN ARE FOR RIGHT END OF FENCE.





ALL DIMENSIONS ARE MILLIMETERS (mm) UNLESS OTHERWISE NOTED.

DWG. NO. 607-45

WOOD SNOW FENCE ANCHOR SYSTEM #2 DETAILS

EFFECTIVE: AUGUST 1999

